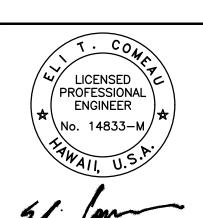
SYMBOL	ABBRV.	DESCRIPTION	SYMBOL	ABBRV.	DESCRIPTION
	AFF	ABOVE FINISHED FLOOR		TC	TIMECLOCK
	AHU	AIR HANDLING UNIT		TD	TIME DELAY
	BV	BALL VALVE		TEMP	TEMPERATURE
	BD	BACK DRAFT DAMPER		TS	TEMPERATURE SENSOR
— ф——	BFV	BUTTERFLY VALVE		THERM.	THERMOMETER
CD—	CD	CONDENSATE DRAIN	H	THERM.	THERMOMETER
<u> </u>	CV	CHECK VALVE		VFD	VARIABLE FREQUENCY DRIVE
	CFCU	CHILLED WATER FAN COIL UNIT	<del></del>		CAPPED/STUBOUT PIPE
	CR	CONTACT RELAY		CW	COLD WATER
	CV	CONTROL VALVE		FD	FLOOR DRAIN
	DP	DIFFERENTIAL PRESSURE	——————————————————————————————————————	POC	POINT OF CONNECTION
(SD)		DUCT SMOKE DETECTOR		POR	POINT OF REMOVAL
	EA/OA	EXHAUST AIR/OUTSIDE AIR	MIN-	RPBFP	REDUCED PRESS. BACKFLOW PREVEN
	EAG	EXHAUST AIR GRILLE		SS	START STOP
	EF	EXHAUST FAN	\$	SW	SWITCH
	EMCS/EMS	ENERGY MNGMT CONTROL SYSTEM		S OR W	SOIL OR WASTE
	EXH.	EXHAUST	— <del>     </del>		STRAINER
_FS	FS	FLOW SWITCH		T & P	TEMP. AND PRESS. RELIEF VALVE
×—	GV	GATE VALVE		TYP.	TYPICAL
	H-O-A	HAND-OFF-AUTO	9		PRESSURE GAUGE
¥		MANUAL AIR VENT	i		UNION
M		MOTOR (ELECTRIC)		VAV	VARIABLE AIR VOLUME
	NO	NORMALLY OPEN		V	VENT
	NC	NORMALLY CLOSED	<b>A</b> —	FSR	FLOW SENSOR
	NPT	NATIONAL PIPE THREAD SIZE	<b>—</b>		FIRE DAMPER

## **MECHANICAL GENERAL NOTES:**

- 1. EXAMINE THE PROJECT SITE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS AND THE EXTENT OF REMOVAL, RELOCATION, RECONNECTION AND/OR NEW WORK PRIOR TO BIDDING. NOTIFY AND COORDINATE WITH THE ARCHITECT FOR ANY MAJOR DEVIATIONS OR DISCREPANCIES DISCOVERED IN THE PLANS AND SPECIFICATIONS DUE TO UNFORESEEN OR VARYING FIELD CONDITIONS. BID SUBMISSION SHALL BE CONSIDERED AS EVIDENCE THAT THE CONTRACTOR HAS VISITED THE SITE AND HAS RESOLVED ALL DISCREPANCIES AND QUESTIONS AND NO EXTRA PAYMENT WILL BE AUTHORIZED FOR WORK MADE NECESSARY BY THE CONTRACTOR'S FAILURE TO DO SO.
- 2. THE ENTIRE INSTALLATION SHALL COMPLY WITH ALL APPLICABLE REQUIREMENTS OF THE BUILDING CODE OF THE STATE OF HAWAII, STATE DEPARTMENT OF HEALTH REGULATIONS, 2018 UNIFORM PLUMBING CODE AS ADOPTED BY THE STATE PLUMBING CODE, 2017 NATIONAL ELECTRICAL CODE AS ADOPTED BY THE STATE ELECTRICAL CODE, ASME BOILER AND PRESSURE VESSEL CODE, ASME PRESSURE PIPING CODE, 2018 IECC INTERNATIONAL ENERGY CONSERVATION CODE AS ADOPTED BY THE HAWAII STATE MODEL ENERGY CODE, 2018 NFPA 1 AS ADOPTED BY THE STATE FIRE CODE, 2018 INTERNATIONAL BUILDING CODE (IBC) AS ADOPTED BY THE STATE BUILDING CODE, AND ALL OTHER AGENCIES HAVING JURISDICTION.
- 3. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER THE COMPLETE INSTALLATION OF SYSTEMS TO FUNCTION AS DESCRIBED AND SPECIFIED. THE OMISSION OF REFERENCE TO ANY NECESSARY ITEM OF LABOR OR MATERIAL SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING SUCH LABOR AND MATERIAL.
- 4. ALL EQUIPMENT SHALL BE CAPABLE OF FITTING INTO THE SPACES ALLOCATED WHILE MEETING THE MANUFACTURER'S RECOMMENDED ACCESS REQUIREMENTS. REVIEW ALL SPACES WHERE EQUIPMENT IS TO BE INSTALLED PRIOR TO ORDERING OF EQUIPMENT AND NOTIFY THE ENGINEER OF ANY INADEQUATE CLEARANCES OR CONDITIONS THAT WILL PREVENT THE PROPER INSTALLATION, MAINTENANCE, AND OPERATION OF THE EQUIPMENT.
- 5. PROVIDE SHOP DRAWINGS FOR THE LAYOUT OF EQUIPMENT, PIPING, AND DUCTWORK SHOWING COORDINATION OF ALL WORK WITH ALL OTHER TRADES, INCLUDING PLUMBING, MED GAS, FIRE SPRINKLER, FIRE ALARM, CONTROLS, ELECTRICAL, AND COMMUNICATION SYSTEMS. COORDINATION DRAWINGS SHALL OVERLAY HVAC, PLUMBING, POL, FIRE SPRINKLER, ELECTRICAL, AND FIRE ALARM SYSTEMS, AND ALL CONFLICTS BETWEEN TRADES SHALL BE NOTED AND RESOLVED.
- 6. VERIFY AND COORDINATE ALL ROOF, WALL, AND FLOOR PENETRATIONS WITH THE STRUCTURAL AND ARCHITECTURAL DRAWINGS PRIOR TO THE START OF CONSTRUCTION.
- 7. OBTAIN APPROVAL FROM THE ARCHITECT BEFORE MAKING ANY PENETRATIONS THROUGH STRUCTURAL MEMBERS, WALLS, AND SLABS.
- 8. VERIFY THE EXACT LOCATION, SIZE, AND INVERT OF ALL EXISTING SEWER, STORM DRAIN, AND WATER LINES AT THE NEW POINT OF CONNECTION PRIOR TO THE START OF CONSTRUCTION.
- 9. DRAWINGS DO NOT ATTEMPT TO SHOW EXACT DETAILS OF PIPING AND DUCTWORK. PROVIDE OFFSETS AS NECESSARY TO AVOID LOCAL OBSTRUCTIONS OR INTERFERENCE WITH OTHER TRADES. REVIEW ALL PIPING AND DUCT RUNS PRIOR TO FABRICATION AND IMMEDIATELY NOTIFY THE ARCHITECT OF ANY INTERFERENCE AND/OR LACK OF ADEQUATE CLEARANCES.
- 10. SHOULD PROJECT CONDITIONS REQUIRE REARRANGEMENT OF WORK, MARK SUCH CHANGES ON THE AS-BUILT DRAWINGS. IF THESE CHANGES REQUIRE ALTERNATE METHODS TO THOSE APPROVED BY THE CONTRACT DOCUMENTS, SUBMIT SHOP DRAWINGS SHOWING THE PROPOSED ALTERNATE METHODS TO THE ARCHITECT FOR REVIEW. DO NOT PROCEED UNTIL REVIEWED.
- 11. PATCH AND PAINT ALL EXPOSED MATERIAL, INCLUDING DUCTWORK, TO MATCH ADJACENT SURFACES OR AS INDICATED.
- 12. REPAIR ANY DAMAGE TO EXISTING CONSTRUCTION RESULTING FROM THE INSTALLATION OF MECHANICAL ITEMS. THE AREAS REPAIRED SHALL MATCH THE ADJACENT SURFACES IN TEXTURE AND COLOR.
- 13. PROPERLY FIRESTOP ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, OR PARTITIONS WITH A UL APPROVED SYSTEM APPROPRIATE FOR THE PENETRATION TYPE AND FIRE RATING. FIRESTOP ALL PENETRATIONS BETWEEN FLOORS.
- 14. PROVIDE ACCESS PANELS TO ALL CONCEALED VALVES, DAMPERS, AND EQUIPMENT. PANELS SHALL BE MILCOR OR EQUAL. COORDINATE THE LOCATION OF ACCESS PANELS TO INSURE THAT THE EQUIPMENT CAN BE MAINTAINED ADEQUATELY.
- 15. PROVIDE SMOKE, FIRE, OR SMOKE/FIRE DAMPERS IN DUCTS AND AIR DEVICES AT ALL FIRE RATED WALLS, CEILINGS, AND PARTITIONS AS REQUIRED BY THE IBC.
- 16. PROVIDE ISOLATION VALVES ON PIPING BRANCH LINES AND VOLUME DAMPERS ON DUCTWORK BRANCH LINES WHETHER SHOWN ON THE DRAWINGS OR NOT.
- 17. PROVIDE MANUAL AIR VENTS AT ALL HIGH POINTS IN HOT WATER, COLD WATER, HOT WATER RETURN, AND CHILLED WATER PIPES.
- 18. SEISMICALLY BRACE ALL EQUIPMENT, PIPING, AND DUCTWORK IN ACCORDANCE WITH THE CURRENT CITY AND COUNTY OF HONOLULU BUILDING CODE FOR SEISMIC ZONE 2A.
- 19. INSTALL CONDENSATE DRAINS AT A MINIMUM SLOPE OF 1/4" PER FOOT. INDIVIDUAL UNIT CONDENSATE DRAINS SHALL BE 1" DIAMETER LINES AND 1 1/4" FOR COMBINED LINES UNLESS OTHERWISE INDICATED.
- 20. INSULATE ALL SEWER PIPING RECEIVING AIR CONDITIONING CONDENSATE DRAINS, ICE DRAINS, OR ANY OTHER COLD LIQUID WHICH MAY CREATE CONDENSATION, FROM POINT OF CONNECTION TO TOP OF CONCRETE SLAB-ON-GRADE. INSULATE FLOOR DRAIN AND FLOOR SINK BODIES EXPOSED TO AIR BELOW THE FLOOR.
- 21. ROUTE ALL CONTROL AND MOTOR STARTER WIRING IN CONDUIT.
- 22. MOUNT ALL ROOM THERMOSTATS AT 4'-0" ABOVE FINISHED FLOOR UNLESS OTHERWISE INDICATED.
- 23. ALL DUCT DIMENSIONS SHOWN ARE NET DIMENSIONS.
- 24.NEW OPENINGS ARE NOT ALLOWED IN CONCRETE BEAMS, GIRDERS OR COLUMNS.
- 25.CONTRACTOR SHALL LOCATE ALL EXISTING REINFORCING IN PRESTRESSED CONCRETE SLABS BY NON-DESTRUCTIVE METHODS PRIOR TO DRILLING AND/OR CUTTING NEW HOLES AND OPENINGS IN SLABS. EXISTING PRESTRESSED TENDONS SHALL NOT BE DAMAGED.
- 26.NEW PIPES AND CONDUITS SHALL NOT BE EMBEDDED IN EXISTING CONCRETE AND CMU WALLS OR SLABS.
- 27.NEW OPENINGS SHALL NOT BE OVERCUT.
- 28.SIGNAL FROM ALL NEW DUCT SMOKE DETECTORS SHALL BE CONNECTED TO EXISTING FIRE ALARM SYSTEM.
- 29.PROVIDE PREMIUM EFFICIENCY MOTORS FOR ALL MECHANICAL EQUIPMENT.
- 30.CONTRACTOR TO INCLUDE TWO YEARS EXTENDED MAINTENANCE PER MANUFACTURER'S RECOMMENDATIONS FOR ALL NEW A/C EQUIPMENT.
- 31.PROVIDE ACCESS PANEL FOR ALL DAMPERS AND VAV BOXES WHERE SHOWN ON THE DRAWINGS OR NOT.





DEPARTMENT OF TRANSPORTATION

STATE OF HAWAII

Licensed Expiration Date

This work was prepared by me or under my supervision.

DSGN.	DRWN.	CHKD.	APPD.

NO.	DATE	REVISIONS

DATE

PROJECT TITLE:

NEW PASS AND ID OFFICE

AT DANIEL K. INOUYE INTERNATIONAL AIRPORT HONOLULU, OAHU, HAWAI'I

PROJECT NO.:

CO1322-63

SHEET TITLE:

MECHANICAL GENERAL NOTES, LEGEND, SYMBOL LIST

DATE : 12/21/22

SHEET

DWG. NO.

41 OF 100 SHEETS